

FINAL DRAFT CAAPP PERMIT
July 12, 2006

217/782-2113

"RENEWAL"
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Bunge Oils, Inc.
Attn: William Hughes, Plant Manager
885 North Kinzie Avenue
Bradley, Illinois 60915

I.D. No.: 091801AAH
Application No.: 96030136

Date Received: November 15, 2005
Date Issued: To Be Determined
Expiration Date¹: To Be Determined

Operation of: Edible Oil Processing
Source Location: 885 North Kinzie Avenue, Bradley, Kankakee County, 60915
Responsible Official: William R. Hughes, Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE an edible oil processing source, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Jonathan Sperry at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JS:psj

cc: Illinois EPA, FOS, Region 1
CES
Lotus Notes

1 Except as provided in Conditions 1.5 and 8.7 of this permit.

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1.0 INTRODUCTION

1.1 Source Identification

Bunge Oils, Inc.
885 North Kinzie Avenue
Bradley, Illinois 60915
815/937-8164

I.D. No.: 815/937-8164
County: Kankakee
Standard Industrial Classification: 2079, Shortening and Cooking Oils

1.2 Owner/Parent Company

Bunge Oils, Inc.
885 North Kinzie Avenue
Bradley, Illinois 60915

1.3 Operator

Bunge Oils, Inc.
885 North Kinzie Avenue
Bradley, Illinois 60915

Ray Landry
815/523-8163

1.4 Source Description

The source is an edible oil processing facility, which produces hydrogenated vegetable oils and animal fats. Liquid raw materials are received from railcars and tank trucks and stored in tanks equipped with carbon canisters for odor control. Raw vegetable oil is refined and coloring agents are removed by adsorption with bleaching clay. The materials are hydrogenated, blended to customer's specifications, and packaged or stored on-site. In addition, the source operates a steam boiler, an electricity generating turbine with an associated duct burner, and a hydrogen reformer, with pipeline natural gas as the primary fuel.

Note: This narrative description is for informational purposes only and is not enforceable.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include PSD and MSSCAM, and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in

effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

- a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ASTM	American Society for Testing and Materials
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
ft ³	cubic foot
gr	grain (7000 gr = 1 pound)
HAP	Hazardous Air Pollutant
hr	hour
I.D. No.	Identification Number of Source, assigned by Illinois EPA
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatt
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
MW	megawatt
MWe	megawatt of electricity
MW-hr	megawatt hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	parts per million
ppmw	parts per million by weight

PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
scf	standard cubic foot
SO ₂	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Dowtherm Boiler No. 1
Dowtherm Boiler No. 2
Dowtherm Boiler No. 3
Dowtherm Boiler No. 4
Dowtherm A Heat Transfer Fluid Loops
Vegetable Oil and Animal Fat Piping System
Cooling Towers
Wastewater Treatment System

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.

3.2.4 For each outside edible oil storage tank identified in Pollution Control Board Order PCB 72-125, the Permittee shall comply with the requirement to maintain and operate activated carbon canisters on the storage tank vents.

3.2.5 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70 °F, the Permittee shall comply with the applicable requirements of 35 IAC 215.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
HR	Hydrogen Reformer (12.2 mmBtu/hr)	1967	None
SB1	Steam Boiler No. 1 (100 mmBtu/hr)	1966	None
DB	Duct Burner (58.4 mmBtu/hr)	August 1989	None
G2	Gas-Fired Turbine/Generator (56.3 mmBtu/hr)	May 1989	None
Refinery	Edible Oil Refinery	1967	None
B1	Bleach Clay Handling System	1982	Clay Silo Filters

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO_x, SO₂ and HAP emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) of the CAA for which USEPA requires a CAAPP permit, pursuant to 40 CFR 70.3(a)(2) [Section 39.5(2)(a)(ii) of the Act]. Specifically, this source is subject to 40 CFR 60, Subpart GG.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (CO, lead, NO₂, ozone, PM_{2.5}, PM₁₀, SO₂).

5.3 Source-Wide Applicable Provisions and Regulations

- 5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.
- 5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.
 - c. Pursuant to 35 IAC 214.182, no person shall cause or allow the total emissions of sulfur dioxide into the atmosphere in any one hour period from all fuel combustion emission sources to exceed the emissions determined by 35 IAC 214.183.

5.3.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this

permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

5.4 Source-Wide Non-Applicability of Regulations of Concern

- 5.4.1 This source is not subject to 40 CFR Part 63, Subpart GGGG, Solvent Extraction for Vegetable Oil Production, because the source is not a vegetable oil production process as defined in 40 CFR 63.2872.

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	36.35
Sulfur Dioxide (SO ₂)	33.40
Particulate Matter (PM)	9.03
Nitrogen Oxides (NO _x)	153.02
HAP, not included in VOM or PM	----
Total	231.80

5.6.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.6.3 Other Source-Wide Production and Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for PSD, state rules for MSSCAM, or Section 502(b)(10) of the CAA. However, there are unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].
- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but

excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].

- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.8 Source-Wide Monitoring Requirements

Source-wide monitoring requirements are not set for this source. However, there are provisions for unit specific monitoring set forth in Section 7 of this permit.

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

5.9.2 Records for HAP Emissions

The Permittee shall maintain records of HAP emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit, pursuant to Section 39.5(7)(b) of the Act.

5.9.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii)

of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including HAP emissions, for the previous calendar year.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source. However, there are provisions for unit specific operational flexibility set forth in Section 7 of this permit.

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be addressed by the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

This section is reserved for emissions control programs. As of the date of issuance of this permit, there are no such programs applicable to this source.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Fuel Combustion Equipment

7.1.1 Description

Hydrogen gas, used to hydrogenate raw materials, is produced by the Hydrogen Reformer. The Hydrogen Reformer is equipped with a natural gas-fired burner that combusts a natural gas and hydrogen gas mixture, with a total heat input capacity of 12.2 mmBtu/hr, and a catalyst bed that cracks natural gas feed to form hydrogen. Emissions from this unit include natural gas combustion products.

Steam and heat for this source are provided by a natural gas-fired duct burner and a steam boiler. The duct burner has a heat input capacity of 58.4 mmBtu/hr. The steam boiler is fueled primarily by natural gas, with #2 fuel oil as a backup, and has a heat input capacity of 100 mmBtu/hr. Emissions from these units include fuel combustion products.

Note: This narrative description is for informational purposes only and is not enforceable.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
HR	Hydrogen Reformer (12.2 mmBtu/hr)	1967	None
SB1	Steam Boiler No. 1 (100 mmBtu/hr)	1966	None
DB	Duct Burner (58.4 mmBtu/hr)	August 1989	None

7.1.3 Applicable Provisions and Regulations

- The "affected fuel combustion units" for the purpose of these unit-specific conditions, are emission units which burn fuel to produce heat or power by indirect heat transfer, as described in Conditions 7.1.1 and 7.1.2.
- Each affected fuel combustion unit is subject to 35 IAC 216.121, which states that the emission of CO into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- Steam Boiler No. 1 is subject to 35 IAC 212.207, which provides that no person, while simultaneously burning more than one type of fuel in a fuel combustion emission unit, shall cause or allow the emission of particulate matter

into the atmosphere in any one hour period in excess of the following equation:

$$E = AS + BL$$

where

E = Allowable emission rate (kg/hr or lb/hr);

A = 0 (since no solid fuel is burned);

B = 0.155 kg/MW-hr (0.10 lb/hr);

S = Actual heat input from solid fuel (MW or mmBtu/hr);
and

L = Actual heat input from liquid fuel (MW or mmBtu/hr).

[35 IAC 212.207]

- d. Steam Boiler No. 1 is subject to 35 IAC 214.162, which provides that no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any fuel combustion emission source burning simultaneously any combination of solid, liquid and gaseous fuels to exceed the allowable emission rate determined by the following equation:

$$E = AX + BY + CZ$$

where

E = allowable sulfur dioxide emission rate (kg/hr or lb/hr);

A = 0 (since no solid fuel is burned);

B = 0.46 kg/MW-hr (0.3 lb/mmBtu);

C = 1.55 kg/MW-hr (1.0 lb/mmBtu);

X = actual heat input from solid fuel or the gasification of solid fuel (MW or mmBtu/hr);

Y = actual heat input from distillate fuel oil or the gasification of distillate fuel oil (MW or mmBtu/hr);
and

Z = actual heat input from residual fuel oil or the gasification of residual fuel oil or any other liquid fuel (MW or mmBtu/hr);

[35 IAC 214.162]

- e. Each affected fuel combustion unit is subject to the emission limits identified in Condition 5.3.2 for opacity (35 IAC 212.123(a)) and sulfur dioxide emissions (35 IAC 214.182).

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected fuel combustion units are not subject to 35 IAC 217.141, because the actual heat input of each affected fuel combustion unit is less than 73.2 MW (250 mmBtu/hr).
- b. Pursuant to 35 IAC 215.303, each affected fuel combustion unit is not subject to 35 IAC 215.301, Use of Organic Material.
- c. The affected fuel combustion units are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans, recordkeeping and reporting requirements of 40 CFR Part 63, Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, because the affected fuel combustion units are large gaseous/liquid fuel units [40 CFR 63.7506(b)].
- d. The affected fuel combustion units are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected fuel combustion units do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Control Requirements and Work Practices

The following conditions were established in Permit 02100028.

- a. The Hydrogen Reformer and Duct Burner shall only be fired with natural gas. Steam Boiler No. 1 shall only be fired with natural gas or #2 fuel oil.
- b. The Permittee shall not keep, store, or use distillate fuel oil (Grades No. 1 and 2 fuels) in the affected boilers with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent, or
 - ii. The weight percent given by the formula: maximum weight percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).
- c. Organic liquid by-products or waste materials shall not be used in the affected fuel combustion units without written approval from the Illinois EPA.

7.1.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected fuel combustion units are subject to the following:

- a. Hourly and annual emissions shall not exceed the following limits:

<u>Equipment</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>
HR	1.22	1.02	0.07	0.1	0.01
SB1	10.0	8.40	0.55	0.76	7.24
DB	5.84	4.9	0.32	0.44	0.04

<u>Equipment</u>	<u>NO_x</u> <u>(ton/yr)</u>	<u>CO</u> <u>(ton/yr)</u>	<u>VOM</u> <u>(ton/yr)</u>	<u>PM₁₀</u> <u>(ton/yr)</u>	<u>SO₂</u> <u>(ton/yr)</u>
HR	5.34	4.5	0.3	0.4	0.03
SB1	43.8	36.8	2.4	3.3	31.7
DB	25.6	21.5	1.4	1.9	0.2

These limits are based on the maximum emissions from natural gas combustion at the maximum operating rates of the affected fuel combustion units.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 02100028, pursuant to PSD. These limits ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].

- b. Usage of #2 fuel oil in Steam Boiler No. 1 shall not exceed 531,429 gallons per month and 1,594,290 gallons per year.

7.1.7 Testing Requirements

- a. The Illinois EPA shall be allowed to sample all fuels stored at this source. This condition was established in Permits 73030779 and 02100028.
- b. Pursuant to 39.5(7)(d)(ii) of the Act, the Permittee shall use USEPA Method 5 for testing PM emissions once every five years during representative operating conditions while burning fuel oil.

- c. Pursuant to 39.5(7)(d)(ii) of the Act, the Permittee shall use USEPA Method 9 for testing opacity once a year during representative operating conditions while burning fuel oil.
- d. Pursuant to 39.5(7)(d)(ii) of the Act, the Permittee shall sample each shipment of fuel oil for the sulfur content, unless the fuel supplier provides an analysis of sulfur content for each shipment.

7.1.8 Monitoring Requirements

- a. Pursuant to 39.5(7)(d)(ii) of the Act, CO combustion analysis should be prepared on an annual basis if fuel oil had been burned for the reported period.
- b. Pursuant to 39.5(7)(d)(ii) of the Act, testing requirements described in Condition 7.1.7(b) and (c) should be used for the purposes of monitoring the operations of the steam boilers during the time when fuel oil is burned.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected fuel combustion unit to demonstrate compliance with Conditions 5.6.1 and 7.1.3 through 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for the affected fuel combustion units (ft³/month and ft³/year);
- b. Total distillate fuel oil usage for Steam Boiler No. 1 (gallons/month and gallons/year);
- c. The maximum sulfur content (weight percent) and the gross heating value of oil (Btu/lb) for each supplier of fuel oil;
- d. Results of CO combustion analysis, opacity testing, and PM emissions testing required by Conditions 7.1.7 and 7.1.8; and
- e. Annual aggregate NO_x, CO, PM, SO₂, and VOM emissions from the affected fuel combustion units, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.1.10 Reporting Requirements

- a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected fuel combustion unit with the permit requirements as follows,

pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. The Permittee shall submit notification within 60 days of operation of an affected fuel combustion unit that may not have been compliance with the opacity limitations in Condition 5.3.2(b), with a copy of such record for each incident.
- ii. If there is an exceedance of sulfur content limits for distillate fuel oil, the Permittee shall submit a report within 30 days after receipt of a noncompliant shipment of distillate fuel oil.
- iii. The Permittee shall report emissions of NO_x, CO, PM, SO₂, or VOM in excess of the limits specified in Conditions 5.6.1 or 7.1.6, based on the current month's records plus the preceding 11 months, within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected fuel combustion unit without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. The Permittee may combust natural gas and/or #2 fuel oil in Steam Boiler No. 1.

7.1.12 Compliance Procedures

- a. Compliance with the CO and PM emission limitation of Condition 7.1.3(b) and (c) is addressed by the fuel records required in Condition 7.1.9(a) and (b) and emission calculations using the emission factor in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, for uncontrolled CO emissions from a gas-fired or oil-fired boiler.
- b. Compliance with the SO₂ emission limit in Condition 7.1.3(d) is addressed by the operating conditions of the affected fuel combustion units fired by distillate fuel oil with a sulfur content meeting the specifications of Condition 7.1.5.
- c. Compliance with the emission limits of this permit shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

- i. Emissions from the affected fuel combustion units burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/10⁶ ft³)</u>
PM	7.6
SO ₂	0.6
VOM	5.5
NO _x	100.0
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement F, March 1998.

Emissions (lb) = Natural gas consumed (ft³) multiplied by the appropriate emission factor.

- ii. Emissions from the affected fuel combustion units burning distillate fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/10³ gallons)</u>
PM	3.3
NO _x	20.0
SO ₂	142*S
VOM	0.2
CO	5.0

These are the emission factors for uncontrolled fuel oil combustion in small (<100 mmBtu/hr) industrial boilers, Tables 1.3-1, 1.3-2, and 1.3-3, AP-42, Volume I, Supplement E, September 1998. "S" indicates that the weight percent of sulfur in the oil should be multiplied by the value given. For example, if the fuel is 1% sulfur, then S=1.

Emissions (lb) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor.

- iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.1.12(c)(i) and (ii) for all affected fuel combustion units.

7.2 Gas-Fired Turbine/Generator

7.2.1 Description

Electricity for this source is generated by the Gas-Fired Turbine/Generator, which is rated for 4,579 kW at base load with a heat input capacity of 56.3 mmBtu/hr. Emissions from this unit are natural gas combustion products. Waste heat from this unit is also used in conjunction with the emission units in Section 7.1 of this permit to produce steam.

Note: This narrative description is for informational purposes only and is not enforceable.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
G2	Gas-Fired Turbine/Generator (56.3 mmBtu/hr)	May 1989	None

7.2.3 Applicable Provisions and Regulations

- a. The "affected gas turbine" for the purpose of these unit-specific conditions, is an emission unit which produces electricity, as described in Conditions 7.2.1 and 7.2.2.
- b. The affected gas turbine is subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subparts A and GG, because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour (10 mmBtu/hr), based on the lower heating value of the fuel fired and the affected gas turbine was constructed, modified, or reconstructed after October 3, 1977. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

i. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.332(c) and (d), no owner or operator of the affected gas turbine shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$\text{STD} = 0.0150 * \frac{(14.4)}{Y} + F$$

where:

STD = allowable NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's peak load (kilojoules per watt hour), or actual measured heat rate based on lower heater value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen calculated from the nitrogen content of the fuel (percent by weight) during the most recent performance test (N), as follows:

Fuel-bound nitrogen (percent by weight)	F (NO _x percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	$0.04 * (N)$
$0.1 < N \leq 0.25$	$0.004 + 0.0067 * (N - 0.1)$
$N > 0.25$	0.005

The use of F in this condition is optional. The owner or operator may determine the appropriate F-value or may accept an F-value of zero.

[40 CFR 60.332(a)(2) through (4)]

ii. Standard for Sulfur Dioxide

The Permittee shall comply with either paragraph A or B below:

A. No owner or operator of the affected gas turbine shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis [40 CFR 60.333(a)].

B. No owner or operator of the affected gas turbine shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight (8,000 ppmw) [40 CFR 60.333(b)].

c. The affected gas turbine is subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the

following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material [35 IAC 215.301].

- d. The affected gas turbine is subject to the emission limits identified in Condition 5.3.2 for opacity (35 IAC 212.123(a)) and sulfur dioxide emissions (35 IAC 214.182).

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected gas turbine is not subject to 35 IAC 214.122, for SO₂ emissions from small sources, because the affected gas turbine does not burn liquid or solid fuel exclusively.
- b. The affected gas turbine is not subject to 35 IAC 216.121, for CO emissions from fuel combustion emission units, because the affected gas turbine is not by definition a fuel combustion emission unit.
- c. The affected gas turbine is not subject to 35 IAC 217.121, for NO_x emissions from new emission sources, because the actual heat input of the affected gas turbine is less than 73.2 MW (250 mmBtu/hr) and the affected gas turbine is not by definition a fuel combustion emission unit.
- d. The affected gas turbine is not subject to 35 IAC 217 Subpart U, NO_x Control and Trading Program, because the affected gas turbine has a maximum design heat input less than less than 250 mmBtu/hr.
- e. The affected gas turbine is not subject to 35 IAC 217 Subpart V, Electric Power Generation, because the affected gas turbine has a nameplate capacity less than 25 MWe.
- f. The affected gas turbine is not subject to 35 IAC 212.321 because due to the unique nature of this process, such rules cannot reasonably be applied.
- g. The affected gas turbine is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected gas turbine does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Control Requirements and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected gas turbine in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not

limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

- b. The affected gas turbine shall only be fired with natural gas. The firing rate of the affected turbine shall not exceed 53 mmBtu/hr or the output of the associated generator shall not exceed 4,431 kW. These requirements were established in Permit 02100028.

7.2.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected gas turbine is subject to the following:

- a. Emissions from the affected gas turbine shall not exceed the following limits:

<u>Pollutant</u>	<u>Pollutant Emissions</u>	
	<u>(Lb/Hour)</u>	<u>(Ton/Year)</u>
NO _x	19.20	83.50
CO	4.45	19.35
VOM	0.11	0.49
PM ₁₀	0.35	1.53
SO ₂	0.30	1.30

These limits are based on the manufacturer's data for the maximum emissions from natural gas combustion at the maximum operating rate of the affected gas turbine.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 02100028, pursuant to PSD. These limits ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].

7.2.7 Testing Requirements

- a. The Permittee shall conduct the performance tests required in 40 CFR 60.8 according to the procedures in 40 CFR 60.335. This includes a performance test not later than 180 days after initial startup and at such other times as may be required by the Illinois EPA using the procedures for determining NO_x emissions specified in 40 CFR 60.335 (for example, USEPA Method 7E or USEPA Method 20).

- b. Pursuant to 39.5(7)(d)(ii) of the Act, the Permittee shall use USEPA Method 9 for testing opacity once a year during representative operating conditions.

7.2.8 Monitoring Requirements

- a. The Permittee shall monitor sulfur content and nitrogen content of the fuel being fired in an affected gas turbine. For natural gas, which is supplied without intermediate bulk storage, the values shall be determined and recorded from monthly data provided by the natural gas supplier. This is a custom schedule for determination of the values based on the design and operation of the affected gas turbine and the characteristics of the fuel supply, substantiated with data submitted to and approved by the Illinois EPA [40 CFR 60.334(i)(3)].

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected gas turbine to demonstrate compliance with Conditions 5.6.1 and 7.2.3 through 7.2.8, pursuant to Section 39.5(7)(b) of the Act:

- a. The heat rate of the affected gas turbine at the rated peak load based on manufacturer's information or the measured heat rate of the affected gas turbine based on the lower heating value of the fuel as measured at actual peak load, kilojoules per watt hour;
- b. Natural gas fuel usage for the affected gas turbine (ft³/month and ft³/year);
- c. The heat content of the natural gas burned in the affected gas turbine (Btu/ft³);
- d. The nitrogen and sulfur content of the fuel burned in the affected gas turbine as monitored pursuant to Condition 7.2.8 [40 CFR 60.334(i)(2) and (3)];
- e. Inspection, maintenance, and repair logs with dates and descriptions;
- f. Log of hourly operation indicating kilowatts output based on fuel input; and
- g. Monthly and annual aggregate NO_x, CO, PM/PM₁₀, SO₂, and VOM emissions from the affected gas turbine shall be maintained, based on fuel consumption and the applicable emission factors in Condition 7.2.12, with supporting calculations.

7.2.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected gas turbine with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. Periods of excess emissions that shall be reported are defined as follows:

- A. Nitrogen oxides.

Any period during which the fuel-bound nitrogen of the fuel (N) is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value [40 CFR 60.334(j)(1)]. Each report shall include the average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions.

- B. Sulfur dioxide.

Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent [40 CFR 60.334(j)(2)].

- ii. The Permittee shall report emissions of NO_x or CO from the affected gas turbine in excess of the limits specified in Condition 7.2.6(a), based on the current month's records plus the preceding 11 months, within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected gas turbine.

7.2.12 Compliance Procedures

- a. Compliance with the operational limits in Condition 7.2.5(b) is addressed by the testing, monitoring, and recordkeeping requirements in Conditions 7.2.7 through 7.2.9.
- b. Compliance with the nitrogen oxides and sulfur dioxide standards in Conditions 7.2.3(b) is addressed by the testing, monitoring, and recordkeeping requirements in Conditions 7.2.7 through 7.2.9.
- c. Compliance with the emission limits in Condition 7.2.3 and 7.2.6 is addressed by the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

- i. NO_x and CO emissions

NO_x and CO emissions may be determined from emission factors developed from emissions testing, if the affected turbine is properly operated, that is, in accordance with Condition 7.2.5(a). Otherwise, emissions shall be determined using the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/mmBtu)</u>
NO_x	$3.264 * 10^{-1}$
CO	$8.364 * 10^{-2}$

These are the emission factors for uncontrolled natural gas-fired gas turbines based on an average fuel heating value of 1000 Btu/scf, Table 3.1-1, Volume I, Supplement F, April 2000.

Gas Turbine Emissions (lb) = (Natural Gas Consumed, ft^3) x (Heat Content, Btu/ ft^3) x (The Appropriate Emission Factor, lb/mmBtu) x 10^{-6}

- ii. Other emissions

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/mmBtu)</u>
PM/PM ₁₀	$6.732 * 10^{-3}$
SO ₂	$(9.588 * 10^{-1}) * S$
VOM	$2.142 * 10^{-3}$

These are the emission factors for uncontrolled natural gas-fired gas turbines based on an average fuel heating value of 1000 Btu/scf, Table 3.1-1, Volume I, Supplement F, April 2000. "S" indicates

that the weight percent of sulfur in the fuel should be multiplied by the value given. For example, if the fuel is 0.1% sulfur, then $S = 0.1$.

Gas Turbine Emissions (lb) = (Natural Gas Consumed, ft^3) \times (Heat Content, Btu/ft^3) \times (The Appropriate Emission Factor, lb/mmBtu) $\times 10^{-6}$

7.3 Edible Oil Refinery

7.3.1 Description

The edible oil refinery is used to produce edible oil products from vegetable oil, which is refined, hydrogenated and blended to meet customer specifications. The operations emit volatile organic material (VOM), primarily hexane, a hazardous air pollutant, due to trace levels of organic solvent remaining in the raw oil from the extraction process that separates the oil from the grain or oil seed. The residual solvent in the raw material is commercial hexane, which contains approximately 62% n-hexane.

Note: This narrative description is for informational purposes only and is not enforceable.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Refinery	Edible Oil Refinery	1967	None

7.3.3 Applicable Provisions and Regulations

- a. The "affected vegetable oil refinery" for the purpose of these unit-specific conditions, includes emission units which refine vegetable oil into edible oil, as described in Conditions 7.3.1 and 7.3.2.
- b. The affected vegetable oil refinery is subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material [35 IAC 215.301].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected vegetable oil refinery is not subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Subpart GGGG, even though it is located at a major source for hazardous air pollutants (HAPs) emissions, because this NESHAP only addresses extraction of vegetable oil from grain or seeds and does not address subsequent refining of the vegetable oil.
- b. The affected vegetable oil refinery is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected vegetable

oil refinery does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Control Requirements and Work Practices

The following conditions were established in Permit 02100028.

- a. The Permittee shall not introduce organic solvent, e.g., commercial hexane or any other hexane, into the vegetable oil during refining at the plant, so that VOM emissions of the refining process result from organic solvent contained in the raw oil received by the source. This condition was established in Permit 02100028.
- b. At all times, the Permittee shall, to the extent practicable, maintain and operate the affected vegetable oil refinery in a manner consistent with good air pollution control practice for minimizing emissions.

7.3.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected vegetable oil refinery is subject to the following:

- a. Emissions of VOM from the affected vegetable oil refinery shall not exceed 2.66 tons/month and 31.9 tons/year.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 96030136, pursuant to PSD. These limit ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD. In addition, the above limitations contain revisions to previously issued Permit 02100028, as reflected in this Title V permit issued on August 6, 2001. Specifically, the VOM emission limits were reduced from 5.34 tons per month and 64.1 tons per year to 2.66 tons per month and 31.9 tons per year due to a lower organic concentration in the raw vegetable oil (252 ppm lowered to 125.4 ppm) [T1].

- b. The maximum amount of vegetable oil processed in the affected vegetable oil refinery shall not exceed 42.42 million pounds/month and 509 million pounds/year. This condition was established in Permit 02100028.

7.3.7 Testing Requirements

Testing requirements are not set for the affected vegetable oil refinery. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.3.8 Monitoring Requirements

Monitoring requirements are not set for the affected vegetable oil refinery.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected vegetable oil refinery to demonstrate compliance with Conditions 5.6.1 and 7.3.3 through 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Total amount of vegetable oil processed in the refinery (lb/month and lb/yr);
- b. Organic solvent contained in raw vegetable oil, e.g., commercial hexane, if the Permittee is relying on actual measurements rather than the maximum organic solvent in the oil as stated in the application (125.4 ppm); and
- c. Monthly and annual aggregate VOM emissions from the refinery, with all supporting documents and calculations.

7.3.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected vegetable oil refinery with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. The Permittee shall report VOM emissions in excess of the limits specified in Conditions 5.6.1 or 7.3.6, based on the current month's records plus the preceding 11 months, within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected vegetable oil refinery.

7.3.12 Compliance Procedures

- a. Compliance with the emission limits of this permit in Condition 7.3.6(a) is addressed by the recordkeeping requirements in Condition 7.3.9 and appropriate emission factors.
- b. For the affected vegetable refinery, VOM emissions may be determined by material balance assuming that all organic solvents in the raw vegetable oil, e.g., commercial hexane, is lost to the atmosphere as VOM emissions during processing of the oil at the source.

7.4 Bleaching Clay Handling System

7.4.1 Description

Coloring agents in vegetable oil and animal fats are removed by adsorption with bleaching clay. Bleaching clay is conveyed by the Bleaching Clay Handling System for the vegetable oil refining process. The spent clay is filtered out and disposed of in a landfill.

Note: This narrative description is for informational purposes only and is not enforceable.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
B1	Bleach Clay Handling System	1982	Clay Silo Filters

7.4.3 Applicable Provisions and Regulations

- a. The "affected dry material handling system" for the purpose of these unit-specific conditions, includes emission units which convey material for the vegetable oil refining process, as described in Conditions 7.4.1 and 7.4.2.
- b. The affected dry material handling system is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(a)].

7.4.4 Non-Applicability of Regulations of Concern

Non-applicability of regulations of concern are not set for the affected dry material handling system.

7.4.5 Control Requirements and Work Practices

- a. At all times, the Permittee shall, to the extent practicable, maintain and operate the affected dry material handling system in a manner consistent with good air pollution control practice for minimizing emissions. This requirement was established in Permit 02100028.

7.4.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected dry material handling system is subject to the following:

- a. PM emissions from the affected dry material handling system shall not exceed 0.069 lb/hr and 0.288 ton/year. These limit are based on the maximum allowable emissions at an operating rate of 36,000 lb/hr and 8,400 hours per year.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 96030136, pursuant to PSD. These limits ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD. In addition, the above limitations contain revisions to previously issued Permit 92060058, as reflected in this Title V permit issued on August 6, 2001. Specifically, the VOM emission limits were reduced from 7.45 pounds per hour and 4.65 tons per year to 0.069 pound per hour and 0.288 ton per year to better reflect actual emissions from the affected dry material handling system [T1].

7.4.7 Testing Requirements

Testing requirements are not set for the affected dry material handling system. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.4.8 Monitoring Requirements

Monitoring requirements are not set for the affected dry material handling system.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected dry material handling system to demonstrate compliance with Conditions 5.6.1 and 7.4.3 through 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Operating rate of the clay silo filters (maximum dscf per minute and minutes per year);

- b. Annual aggregate PM/PM₁₀ from the silo filters, with all supporting documents and calculations; and
- c. Logs of inspection, maintenance, and repair for the silo filters controlling the dry material handling and storage.

7.4.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected dry material handling system with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. The Permittee shall report PM emissions in excess of the limits specified in Conditions 5.6.1 or 7.4.6, based on the current month's records plus the preceding 11 months, within 30 days of such an occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected dry material handling system.

7.4.12 Compliance Procedures

- a. Compliance with the PM emission limits in Condition 7.4.3(b) is . addressed by the operating requirements in Condition 7.4.5, the maximum operating rate of the filters (dscf per minute), and the emission factor indicated below.
- b. Compliance with the emission limits of this permit shall be determined by material balance equations using the records required by Condition 7.4.9 and a controlled emission factor of 0.005 gr/dscf.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____ (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test

methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA

every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7) (f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7) (a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The

test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

- i. Illinois EPA - Air Compliance Unit

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency
Bureau of Air
Air Quality Planning Section (MC 39)
P.O. Box 19276
Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any regulated activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5) (e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7) (o) (v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5) (1) and (o) of the Act].

Note: Pursuant to Sections 39.5(5) (h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

- a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].
- i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

- A. Up to process weight rates of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

- B. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8
B	0.16	0.16

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric P <u>Mg/hr</u>	E <u>kg/hr</u>	English P <u>T/hr</u>	E <u>lb/hr</u>
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

b. Existing Process Emission Units for Which Construction or Modification Prior to April 14, 1972 [35 IAC 212.322].

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].

ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and

E = Allowable emission rate; and,

A. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

B. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

iii. Limits for Process Emission Units For Which Construction or
Modification Commenced Prior to April 14, 1972 [35 IAC
212.322(c)]:

Metric P <u>Mg/hr</u>	E <u>kg/hr</u>	English P <u>T/hr</u>	E <u>lb/hr</u>
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

www.epa.state.il.us/air/caapp/199-caapp.pdf

www.epa.state.il.us/air/permits/197-fee.pdf

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